

# **Expression of Interest**



City of Indianapolis
Indiana

# Water, Wastewater and Infrastructure Services Management Approach

August 21, 2009





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The City of Indianapolis Office of the Mayor 2501 City-County Building 200 East Washington Street Indianapolis, Indiana 46204

<u>Attention</u>: Michael Huber, Director of Enterprise Development

Subject: Request for Expression of Interest (REI)

Dear Mr. Huber:

The City of Indianapolis is facing challenges to fund infrastructure improvements that have been left unresolved for decades. Bridges are in need of repair, sidewalks and curbs are crumbling or do not exist, the water and wastewater systems need significant ongoing investment to continue to protect the public's health and the environment, and the U.S. Environmental Protection Agency has dictated improvements to the CSO system that the City has no choice but to make, at costs estimated to be in the billions.

This REI is indicative of the political will to aggressively address these challenges and the vision to challenge interested parties to present concepts and ideas to pay for and precisely manage needed infrastructure advancements that achieve the level required for one of the country's most livable cities. Veolia Water embraces and is excited to face these challenges with the City and to contribute solutions that return Indianapolis to a leadership role in the advancement of efficient management of water and wastewater services in the United States. We are indeed convinced that with "out-of-the-box" thinking and strong political will, workable creative solutions can be implemented without compromising the City's vision or giving up its natural prerogatives and leadership role in setting policies and direction for water and wastewater services that are so critical to the community at large.

When **Veolia Water** began to manage **Indianapolis Water** in 2002, the City had a history of taste and odor problems going back more than 100 years. Many people expressed with resignation that "it had always been this way and nothing could be done about it." Veolia Water was not resigned to this situation, and we brought to bear the global resources and expertise of our company and fixed the problem. Taste-and-odor complaints have now virtually been eliminated and become a part of history, while our cost to manage the utility is currently less than the former water company's 2001 costs by more than \$2 million! We have made significant value-added contributions to water quality, infrastructure and service increases – all while enabling the City to keep rates low.

Now as a part of the Indianapolis community (where we have relocated our North America Business Operation Center, creating nearly 100 high-paying jobs), we bring the same determination, innovative spirit and commitment to make available our best professional water and wastewater operations skills, technologies and proven experience to stand with the City as it pro-actively addresses the challenges of future infrastructure improvements at affordable rates.

This Expression of Interest submittal (EOI) highlights, for your consideration, concrete concepts and ideas to achieve the objectives set out in the REI. We would be happy to further explore those ideas that you believe most appropriate and then, in the next phase of this open competitive process, to detail the potential steps and structures as well as the economical and financial results that can be expected.

As you review this EOI, we draw your attention to several issues to consider within the framework of your discussion as you move forward with this process:

- Veolia Water's proven innovative and technical capabilities can be applied to:
  - The CSO program, to reduce costs, mitigate risks (including those of cost overruns) and guarantee compliance with the Consent Decree;

- The anticipated water shortage and raw water quality fluctuations, to develop long-term solutions in the most cost-effective manner;
- Continued investment in the water treatment system, to deliver the best in management systems and technologies while accessing our company's considerable technical support resources to ensure cuttingedge practices and solutions to the many challenges faced within the water system on a daily basis;
- Bring a more integrated structure of management to water and wastewater services, including management of the CSO program and other capital works to optimize management of these services through synergies and cost reduction – a commitment we can make due to our management of the water system and deep knowledge of the wastewater system gained during the development of our proposal during the recent competitive process to manage it; and
- A host of other community needs such as water conservation and water reuse to resolve water source issues, installing water and wastewater service to the 30,000 residences currently without adequate drinking water, improve the capacity and performance of existing underground infrastructure to relieve capacity stress on existing treatment facilities through sound management and developing new sustainable drinking water sources that will serve the City into the next generation.
- Developing "Green" processes within the water and wastewater utilities that protect the environment and potentially generate carbon credits that can be used as an economic development tool for the City.
- Veolia Water has introduced a structure that we believe covers the intent of the REI, which creates a non-profit Corporation vehicle that maintains the value inherent to U.S. local government enterprises, including the longstanding trust in public governance by keeping City oversight and decision-making and preserving attractive rates and terms provided by the municipal debt markets. Our structure will enable the creation of synergies from a combined Water and Wastewater Utility, including cost saving and efficiencies for execution of capital needs. We believe that the synergies and capital savings will provide an opportunity for the City to monetize these benefits to address its infrastructure needs as the economic engine for the City and surrounding communities through our suggested structure for your consideration. In other words, our structure is the City's best option to: (1) monetize the upfront value, (2) maintain the City's role, and (3) derive synergies.
- Independent of the City's decision with respect to this particular initiative, Veolia Water is committed to our current partnership and ready to suggest adjustments to the current arrangement and governance that could have a potential positive sustainable impact on the economics of the drinking water services both on the operation and the investment side. This could even include developing synergies with the wastewater services, the CSO management program, and even other utilities such as natural gas under their current management structure.

We have structured our submittal to provide all of the information requested, and to clearly demonstrate our support for this important initiative.

We have also sought to define our vision of this new water and wastewater management and operations structure. It is a structure that will challenge the status quo and offer a clear set of long-term benefits for the City and rate payers. Our proposed model is unique to the City of Indianapolis, but is built on the experience and structures that Veolia Water companies have successfully applied in Europe, Australia and Asia.

Our goal, as it was when we first proposed to the City of Indianapolis on the water partnership back in 2002, is to bring the resources of the world to your doorstep, while supporting this important infrastructure initiative.

This is the commitment that our team in Indianapolis, under the leadership of Dave Gadis, strives towards every day under our current water partnership, and also a commitment that our company as a whole, under my leadership, will offer for the new combined approach.

Sincerely yours,

President

Veolia Water North America Operating Services, LLC

David Gadis President

Veolia Water Indianapolis, LLC





# **Table of Contents**



# **Table of Contents**

# CD Copy of Submittal – Provided in a separate envelope.

# Response to Request for Expression of Interest

Page No.

Cover Title Page Letter of Transmittal

## Introduction

EUI Considerations	I
The City's Combined Waterworks & Wastewater Proposal	2
Did you Know?	
<b>Expression of Interest Response</b>	
Section 1 – Contact Information	4
Section 2 – Technical and Practical Experience	4
- Figure 2.1 – Veolia Water – Demonstrated Experience in All Relevant Work Areas	5
Operations and Management	6
Process Design	6
Engineering	7
Project Management	7
Construction Experience	8
Associated Experience	9
Public-Private Partnerships	10
Financing Models	10
Local Contracting Partners	11
Environmental Sustainability and Stewardship	12
Section 3 – References	13
Section 4 – Potential Structures	14
(a) The Combined Operation of the Wastewater and Waterworks Systems	14
(b) Wastewater, including CSO, Capital Improvements that Advance the City's Objectives as described in this REI	15
Section 5 – Potential Synergies	16
Other Potential Synergies	16
- Figure 5.1 – Annual Operation and Maintenance – Indianapolis Water Comparison of IWC and Veolia Water O&M and Management Fee	17



Cost Savings through Revisions to Our Current Public-Private Partnership	18
Additional Concepts	18
- Figure 5.2 – Veolia Water Indianapolis – Performance vs. Industry Standards	19
Section 6 – Proposed Cost Effective Solutions and Procurement and Contract Models	19
Capital Program Management	19
Build America Bonds	20
- Table 6.1 - Comparative Financing with 30-Year Bullet Structure	20
Recovery Zone Bonds	20
- Table 6.2 - Recovery Zone Bonds Allocation	21
Section 7 – Risk Matrix	22
Table 7.1 – Illustrative Risk Matrix	22
Section 8 – Suggested Partner Options	23
Introduction	23
Proposed Structure for Waterworks System	24
- Figure 8.1 – Indianapolis Water Utility Model	24
Proposed Structure for Wastewater System	24
- Figure 8.2 – Indianapolis Sewer Utility Model	25
Suggested Legislation	26
Credit Considerations	26
Credit Considerations	26
Expedited Approach	27
Section 9 – Compensation Models	27
Section 10 – Maximum Length for Strategic Partnership Relationships	





# Introduction



#### **INTRODUCTION**

Water is our most important natural resource and one that is critical, not only to the health of our citizens but to the health of our community. Managing our water resources is a complex undertaking, involving cutting-edge technology, systems and processes that require significant capabilities and experience. Public health, environmental responsibility, cost-efficiency and the technological demands associated with delivering on these requirements demand the most experienced and qualified partner, one with the most-established local and global track record.

Did you know?

Veolia Water brought

innovation and cutting-edge capabilities to bear to solve taste and odor problems in our drinking water, problems which have plagued the water system for over 100 years.

Veolia Water North America Operating Services, LLC

(Veolia Water) is pleased to submit this Expression of Interest (EOI) as a company dedicated to water treatment and environmental protection, with the experience and capabilities proven for more than 156 years. Today, Veolia Water ranks as the world's largest and most experienced water company, and brings unmatched resources and capability to Indianapolis each and every day.

In this EOI, submitted to meet the requirements of the City's Request for Expressions of Interest (REI), we provide summary information on our experience and capabilities, along with concrete ideas and concepts to address and resolve the infrastructure challenges clearly outlined in the REI.

Veolia Water embraces this initiative, and is committed to standing side-by-side with the City of Indianapolis to bring all of our creativity and resources to bear on what would be an expanded and hallmark partnership.

#### **EOI** Considerations

Our EOI should be reviewed with the following underlying statements in mind:

- While the stated objectives in the REI are to consider alternative ownership and financing structures for the water and wastewater systems and CSO program, Veolia Water considers that the City is starting from a strong position as a tax-exempt owner of the assets. This enables the City to meet its responsibilities to ratepayers while controlling policy with respect to water and environmental protection. Veolia Water's objective is to present a solution that does not undermine the City's inherent advantages.
- Veolia Water applauds the City's stated objectives for a successful public-private partnership as one that preserves the long-standing trust inherent to local governmental enterprises and the attractiveness of municipal debt markets available to the City and the ratepayers today. We consider these challenges in our response.
- The private sector can partner with the City to help it meet its objectives in many ways that bring significant capability to bear in the most cost-effective manner.
- There are numerous opportunities to impact the cost structure of water and sewer rates to improve governance, take advantage of opportunities for improved synergies between the water and sewer systems and the Department of Public Works and other City departments. Veolia Water will work with the City to take advantage of these opportunities, including implementing modifications to our own partnership to do so.
- No option, including the status quo, should be accepted with resignation as the way things need to be, whether with respect to rates or governance or management structures. It is widely understood that Citizens Gas has an interest in purchasing the water and wastewater assets, and that this may be attractive to the City as a means of funding needed improvements to its basic infrastructure, including roads, bridges, sidewalks and culverts. Veolia Water believes that our approach affords the City all of the advantages of the Citizens Gas approach, while avoiding some of its inherent consequences in terms of permanent loss of control and oversight. Further, a single team built on the expertise and direct, daily knowledge of public and private-sector employees already keenly familiar with the system will best serve our community.
- The CSO program, due to the significant costs involved, affords a unique opportunity for alternative implementation methods. It is important to differentiate between value engineering and public-private partnerships when considering these alternatives. Value engineering is an important exercise typically done within conventional design, bid, build public-sector implementation. Public-private partnerships have been proven to

afford savings of 10 to35%, when compared to even the best public-sector projects, even those that have been value engineered.

• As we consider the REI and the significant changes it could imply for the water, wastewater and CSO systems, we keep employees at the forefront of our consideration. We will endeavor to keep them informed, as best we can, of all aspects of this situation. As you read this EOI and note some of our highlighted "Did you know?" facts, you will appreciate the dedicated and hard-working group of professionals at Veolia Water Indianapolis.

## The City's Combined Waterworks & Wastewater Proposal

As stated in the REI, there are three elements of the City's combined waterworks and wastewater proposal:

- 1. Achieving cost reductions with respect to the implementation of the CSO and wastewater system improvements program.
- 2. Realizing synergies from combining the operations of the water and sewer systems along with the possibility of any additional synergies and cost savings in other potential sectors that would benefit the inhabitants of the City.
- 3. In addition, the City invites respondents to challenge the City's current thinking and suggest alternatives that help reduce the costs to ratepayers, make necessary investments in our basic infrastructure, and meet or exceed applicable environmental standards.



Veolia Water's core expertise focuses on water and wastewater issues. Important issues remain unresolved with respect to: long-term water supply; water and sewer rates, which are anticipated to increase at dramatic levels, assuming everything goes as planned without cost overruns and potential legislative changes; and regulatory actions and public concerns, which will increase the demands on the system and require continued improvements.

Therefore, as we consider the challenges currently facing the City and on the horizon, Veolia Water suggest an "all hands on deck" type of approach, and further consideration be given to the following:

- Watershed Management Our research and development (R&D) program with IUPUI has focused on studying the watershed that provides the source water for our drinking water. By bringing together stakeholder groups in an "all hands on deck" effort, many of the watershed issues faced by the City can be resolved. Many of these stakeholders possess expertise that complements the capabilities of Veolia Water to resolve point source and non-point sources of contaminants that may threaten the City's water supply. Further, these groups can assist in furthering efforts to monitor and protect the City's well head protection area. All of these activities can positively impact water quality and reduce the capital costs associated with drinking water treatment.
- Water Conservation Demands on the water system continue to increase, putting an increased strain on the
  wastewater system. Veolia Water brings decades of experience in implementing and supporting water conservation
  programs throughout the world. While it is challenging to anticipate the cost benefits of conservation with respect
  to future growth and capital requirements, the benefits are real and a good water conservation program will result
  in reductions to future capital requirements. Public concern with the environment means that conservation efforts
  have a higher likelihood of acceptance and success.
- Water Rate Study Veolia Water suggests that public policy surrounding the use and payment of the water supply is a critical issue that should not be abdicated to others. In other jurisdictions, water rates are used to stimulate economic development, assist with issues associated with poverty, and many other community priorities. Our experience suggests that evaluating water rates is much more complex than deciding how high they should be raised. We recommend consideration of "best practices," including tiered rates, timing rates to supply and demand so that water usage is less expensive during non-peak demand periods, tying rates to water conservation efforts, etc. Significant benefits could be realized, not the least of which is enhanced public acceptance of the rates necessary to improve the system and how citizens could help with the problem. The current IURC rate return committee decision to consider rate structuring grew out of discussion in Veolia Water's Technical Advisory Group.



• Other Ideas. Veolia Water's "all hands on deck" approach to problem-solving was demonstrated in the effort to bring the City, the academic community and environmental groups together to resolve the taste and odor issues, and has proven that stakeholders can contribute to water and wastewater solutions. The "all hands on deck" approach can be used to: develop innovative solutions to CSO and SSO issues; develop plans for small, targeted wastewater treatment plants that discharge into streams below the Broad Ripple and Fall Creek dams to augment source of supply and preserve reservoir levels; as well as to develop water reuse methods that facilitate the groundwater recharge of the City's South Well Field, thereby augmenting source of supply.

## Did you Know?

As you review our EOI, we draw your attention to the "Did you know?" highlights. These underscore important facts about our employees and the remarkable job they do in the community.

Important additional information can also be found on our website for this EOI at:

www.veoliawaterindianapolis.com







# **Expression of Interest**



# EXPRESSION OF INTEREST RESPONSE

#### Section 1 – Contact Information

**Veolia Water North America Operating Services, LLC** (Veolia Water), the company that has been the City's partner for water operations over the past seven years (as **Veolia Water Indianapolis**), is pleased to have the opportunity to again communicate our vision for delivering on the synergies that can be found in a joint water/wastewater operations approach.

Our history in partnering with the City to shape and deliver on new approaches dates back to the 2001 water procurement and our selection. Veolia Water's leader for the development and a key part of our initial transition team, was **Mark Sanderson**.

Veolia Water mobilized resources from throughout the world to help develop and deliver on the innovative approaches proposed for the City's water operations, and we continue to use this approach.

Now an Indianapolis resident and Vice President for Municipal Development with Veolia Water, Mark keenly understands the critical challenges that the City faces.

With more than 30 years of professional experience, Mark has led other teams focused on helping large cities address infrastructure management issues. Most recently, he led our Milwaukee wastewater project team. Milwaukee has now reached new heights with system and process improvements, additional cost savings and another year of perfect compliance.

Mark recently visited Veolia Water's partnership operations in Australia and China to gain first-hand knowledge and experience with our alliance partnership and concession models in order to understand how these tools can be applied in North America.

His contact information is:

Mark Sanderson – Vice President, Municipal Development Veolia Water North America Operating Services, LLC 101 West Washington Street, Suite 1400 East, Indianapolis, Indiana 46204 Cell: 317/260-8203 – Office: 317/917-3700 – Fax: 317/917-3718 – E-mail: mark.sanderson@veoliawaterna.com

Several other individual members of our management team that should be noted because they understand the City's needs and will continue to deliver our company's global resources to Indianapolis, they include: **Laurent Auguste**, President and Chief Executive Officer of Veolia Water Americas and a member of the Executive Board of Veolia Eau – Compagnie Générale des Eaux S.C.A. (the parent company of Veolia Water's global operations); **David Gadis**, President of Veolia Water Indianapolis, who has been a key leader of the water team since the start of our partnership with the City; and **Chibby Alloway**, Veolia Water North America's Chief Technical Officer, who provides our Indianapolis operations with access to the global engineering, technologies and other resources of Veolia Water companies.

## Section 2 – Technical and Practical Experience

Veolia Water daily provides a comprehensive range of expertise and experience that cover all aspects of the service and experience requirements defined by the City's Request for Expression of Interest (REI).

Figure 2.1, which follows, provides a listing of reference projects, including our current work with the City of Indianapolis, as well as 10 other projects that clearly demonstrate our experience.

Veolia Water's expertise encompasses our more than seven years of work as the water operator and manager in Indianapolis, as well as our work in Milwaukee, as the operations manager for the In North America, Veolia Water has the largest water partnership (Indianapolis), the largest wastewater partnership (Milwaukee), and largest DBO project (Tampa Bay Water, Florida).

Milwaukee Metropolitan Sewerage District's regional wastewater systems. These two projects alone demonstrate our experience in most of the Technical and Practical Experience areas identified in your REI. Other reference projects, such as Berlin and Shanghai-Pudong, demonstrate our company's experience with financing and innovative partnering approaches. Additionally, we discuss our technical and practical experience in each of the disciplines, which will demonstrate to the City that we bring the experience needed to advance your objectives.





■ Innovative ownership/concession type projects, large R&D investment



#### **Operations and Management**

Veolia Water manages the largest water system partnership in the U.S. (Indianapolis), the largest wastewater system partnership (Milwaukee), and the largest design-build-operate (DBO) project (Tampa Bay Water), which also includes a substantial operational component, advanced technologies, and a demonstrated ability to coordinate joint activities across all engineering, construction, operations and technology disciplines.

Our contract with the **Milwaukee Metropolitan Sewerage District** (MMSD) involves operating the regional wastewater plants, sewer network and the Milorganite® production facility. It also has a significant storm flow management component, with responsibility for managing significant underground assets, including more than 350 miles of complex underground conveyance systems for wastewater and stormwater.

Two major tunnels, 17 to 32 feet in diameter and 175 to 300 feet below the surface, provide an effective capacity to store 500 million gallons of wastewater and storm flows. Managing flows during wet weather events has been an ongoing challenge for the MMSD, and a significant aspect of Veolia Water's plan for Milwaukee is the development of a Wet Weather Operations Plan. When a wet weather event is anticipated, Veolia Water's Wet Weather Operations Team initiates a series of protocols that maximize the capacity of the District's unique inline storage system, thereby reducing flows and loadings to the treatment plants. Veolia Water's approach minimizes surcharging while maximizing treatment capability. Sewer overflows are reduced and environmental compliance is enhanced. Part of this effort includes scheduling additional plant and field resources to effectively handle a wet weather event.

In **Indianapolis**, Veolia Water operates all elements of the water treatment and supply system, provides capital project repairs and upgrades, and also manages a large customer service operation. This is a 20-year, \$1.1 billion partnership, with an incentive-based fee structure, to provide water to nearly 1 million people through the operation and management of 200-MGD water production and a 4,000-mile distribution network.

Veolia Water also worked with the City to establish a set of key performance indicators (KPIs) that would form the basis for the award of a portion of our fee each year under the contract. Under the incentive plan, a portion of our company's fees (25%) are paid only if we meet specified customer service, water quality, operations and other performance measures. By directly linking performance to compensation, this partnership is establishing a new model in the water outsourcing industry. Over the past two years, Veolia Water has achieved better than 96.5% of the incentive payment.

Additionally, in North America and throughout the world, there are numerous communities where our company operates the water and wastewater operations. In North America some of our long-term projects include Brockton, Massachusetts (since 1989), Edwardsville, Illinois (since 1987) and Junction City, Kansas (since 1989), to name just a few. Internationally, one of our largest and most comprehensive water and wastewater operations is in partnership with Berlin, Germany. The facilities that are a part of our Berlin operations meet the needs of more than 3.5 million people for water services and over 4 million people for wastewater services.

#### **Process Design**

Veolia Water's core business is providing water and wastewater products and services, devising customized solutions, and delivering cost-effective, reliable systems guaranteed for quality, safety and compliance. This is accomplished through all of the Veolia Water companies.

Our company has the largest installed base of technology of any water company in North America, where we operate and manage more than 400 facilities. We also own or license more than 3,000 active patents worldwide, and continues to develop new technologies that raise the bar in water and wastewater treatment approaches for municipal clients.

Veolia Water companies provide leadership in the development and application of leading-edge technologies and design solutions for water and wastewater facilities. Our work in Honolulu, Hawaii, and Tampa Bay, Florida, are two of the key reference projects that we have included to highlight this experience.

In 2007, Veolia Water's contract with **Tampa Bay Water** was expanded to include a new DBO project that will nearly double (to 120-MGD) capacity at the Tampa Bay Water Regional Surface Water Treatment Plant. When selected in 2000, Veolia Water led a team of companies that designed, built and now operate the facility. The new contract amendment, amounting to \$121.7 million, raises the DBO value of this project to over \$275 million, making this facility among the largest such projects in the U.S. The contract amendment also builds upon the success of the original water partnership by utilizing the same technology process train, featuring Veolia Water's patented ACTIFLO® clarification process.

In **Honolulu**, Veolia Water provided DBO services for a new wastewater reclamation plant to serve municipal and commercial needs. The plant generates two qualities of water: one, a high-purity reverse osmosis (RO) water, which is



sold to the industrial users for power and petrol-refining uses at nearby Campbell Industrial Park, and the other quality, R1 Water, is used for irrigation. The industrial processes use 2-MGD of RO Water, freeing about 3.6 MGD of valuable potable water for potential residential/domestic uses. Major plant process components include microfiltration, reverse osmosis, coagulation, flocculation, filtration and UV disinfection.

The Honolulu project has been recognized by the WateReuse Association though its 2003 award for Outstanding Contribution to Sustainable Water Use, and also by the U.S. Conference of Mayors, which honored the project with its 2002 Outstanding Achievement Award.



#### Engineering

Here in **Indianapolis**, a large component of the Veolia Water contract involves capital project work, and we have executed in excess of \$200 million in capital work to improve the City's aging water infrastructure in first seven years of the contract, and another \$200 million is anticipated to be completed in the next several years of the contract term. This work has included a new \$6.5 million water treatment residuals handling facility to eliminate all surface water treatment plant disposal by sending it to the Indianapolis sewer system for proper treatment. Veolia Water also made an investment of \$750,000 in SCADA/technology improvements at the water treatment plants to enhance chemical and power management through better data collection, increased on-line monitoring and improved trend analysis.

Veolia Water Indianapolis has also made investments in laboratory upgrades to improve the level of detail of analysis, enhancing the quality data obtained from water analysis data collection.

In **England**, Veolia Water is the owner, operator and manager of Three Valleys Water PLC, a private company that manages the drinking water system that serves the needs of more than 3 million people in southeast England (which includes suburban areas of London). The company has been owned and operated by Veolia Water, under the name Three Valleys Water since 1988. Under the English and Welsh Water Industry regulations, Three Valleys Water is obligated to finance and implement a capital program (expending \$455.2 million in the period from 2005 to 2010) to maintain its assets and operate in conformity with the quality and levels of service standards. Most of this capital money is targeted for renewal of above-ground and underground infrastructure, including: the renewal of the underground pipe network; the renewal of above-ground assets, including pumping stations, reservoirs, buildings and IT systems; new infrastructure to meet water supply/demand issues; and \$25.2 million in water quality improvements at the treatment works. O&M responsibilities include the maintenance of 90 surface water and groundwater treatment plants; supervision and maintenance of the distribution system, including meter reading and connections; and billing, collections, connections and customer information requests.

In the wastewater arena, Veolia Water is working with our client in **Milwaukee** to plan and implement a capital program. Under the leadership of our dedicated capital program manager at Milwaukee, Veolia Water contributes to the MMSD's development of a long-range capital improvements program. During the first year, we prepared a capital plan of recommended projects having a total value of \$34 million. We actively participate and provide input into client capital projects.

#### **Project Management**

Veolia Water has management responsibility for some of the largest water and wastewater operations in the world, and we have worked with our clients to manage and implement large-scale wastewater improvement and expansion projects. Key examples of this experience include:

• Veolia Water assumed O&M responsibility for the solids processing facilities in 1985, and in 1998, we were awarded a new 20-year, \$224 million O&M contract to manage the entire wastewater treatment process for the City of Wilmington, Delaware's 134-MGD high-rate activated sludge wastewater treatment plant. During the first two years of this contract, our firm financed, designed and built \$15 million in capital improvements. We also worked with the City to maximize diversion of combined sewer overflows (CSOs) into the treatment plant for effective treatment. Our goal is to accept and treat as much storm flow as possible, thus minimizing the discharge at the CSOs.



• Under separate contracts, Veolia Water has full responsibility for the O&M of the City of Richmond, California's, 16-MGD secondary activated sludge water treatment plant. We also manage 280 miles of collection system and stormwater pipe and 20 lift stations. Included in the collection system contract are 5,200 manholes and 3,300 catch basins. At the start of this contract, we were responsible for the oversight and management for design/build implementation of some \$7 million in capital improvements to the wastewater treatment plant. This work focused on updating, modernizing and automating the existing processes and systems at the facility. From top to bottom this facility's equipment and processes were upgraded and improved to achieve optimum operating levels. In less than two years, Veolia Water had achieved our primary goals of increasing the efficiency and effectiveness of plant operations and, in turn, curtailing discharge violations and controlling odors. Improved plant operations and system upgrades have resulted in a dramatic turnaround in regulatory compliance and a vast reduction in odors. The success of the wastewater facility upgrade program resulted in the award of a similar effort for the 279-mile collection and stormwater system — adding \$17 million in capital to Veolia Water's O&M project scope. The scope of work includes a major rehabilitation of the City's collection systems and lift stations, as well as asset management of the systems when capital improvements are complete. Currently, the system suffers from significant infiltration and inflow (I/I) problems that contribute to overloading of the treatment plant, particularly during winter storms. As part of its service, Veolia Water is inspecting and cleaning main lines and manholes, repairing and maintaining lift stations and providing customer service. We also will tie the collection system into the automated controls and the wastewater plant. The benefits that the City of Richmond will realize from this expanded partnership include ensure regulatory compliance, the transfer of risk, a long-term budget with guaranteed costs and efficiencies in staffing and systems through integration of the wastewater and collection system operations.

#### **Construction Experience**

Over the years, Veolia Water has grown to be the largest U.S. provider of water and wastewater O&M services for municipal clients, today serving the needs of more than 650 communities across North America. We also are a leader in the DBO industry, and in recent years, we have been involved in some of the largest and most innovative DBO projects in the industry, ranging in scope from New York State's first DBO contract for a new "greenfield" water reclamation plant to a second DBO contract with Tampa Bay Water, Florida, for a large-scale expansion of their surface water treatment plant, which was built by Veolia Water under an earlier DBO partnership. The greenfield reclamation plant in New York, being built for Rockland County (located just 20 miles from New

purchased by Veolia Water under the water contract are from local companies, meaning the dollars spent stay in the community, to benefit our local economy.

York City), is unique in the northeastern U.S., as it is the first municipal reclamation plant that will treat effluent to near-drinking water quality standards (equivalent to California Title 22) and recharge the aquifer for reuse in a public water supply well field.

Added to this are the resources of Veolia Water Solutions & Technologies (VWS), the engineering and technologies arm of Veolia Water in North America and internationally. VWS is the world's largest designer of technological solutions and constructor of water treatment facilities for both municipalities and industry. The company has more than 70 years of experience and over 7,100 employees that are part of 120 business units. These business units meet the needs of clients in 57 countries, drawing on more than 500 unique technologies and 3,000 patents to provide appropriate water and wastewater solutions. They provide leadership in delivering engineering, technologies and construction services and approaches to industrial and governmental clients across the world.

Their efforts are focused on continuously advancing and improving water and wastewater treatment technologies in response to current and future treatment challenges. They also maintain partnerships with universities and research institutes around the world to ensure that they maintain technological leadership in the water and wastewater industry. The firm's products are designed for every type of pollution, from clarification of domestic wastewater or sludge and air treatment, to stormwater management. Further, VWS is recognized for its expertise and offers a full range of wastewater solutions and services.



In terms of our experience with the management and implementation of large-scale wastewater capital upgrade and expansion projects, Wilmington, Delaware, represents a key example of this, along with these other ongoing projects:

• Woonsocket, Rhode Island – This project has involved implementing an \$18 million DBO effort focused on wideranging improvements for this regional wastewater treatment facility. This effort included preparing and receiving State regulatory approval for the Facility Plan Amendment. The improvements, managed and implemented by Veolia Water, were plant-wide, touching virtually every aspect of the treatment process at the City's 16-MGD activated sludge plant, which was upgraded to tertiary treatment levels. For this DBO project, Veolia Water assembled a team of multi-disciplined professionals and worked with the City to secure tax-exempt financing for 20 years. In addition, a \$3.9 million concession fee was paid by Veolia Water to the City and three other communities to reimburse them for improvements made prior to our O&M agreement. During the first six months of our operation, Veolia Water made great strides toward improving wastewater treatment and achieving total compliance with discharge limits. This contract is anticipated to save the City of Woonsocket \$7 million. The plant upgrades were completed ahead of schedule and for a fixed fee. Even before the upgrades were completed, the plant – once ranked worst in the state – was winning awards.

Veolia Water has also begun a new project to address CSO, SSO and collection system maintenance. The scope of this new contract will include the O&M of the collection system that conveys the wastewater to the treatment plant under a long-term agreement that will involve asset management and investment, along with the purchase of the City's assets that are currently used in the O&M of these facilities.

• Veolia Water joined forces with the **City of Palm Springs, California**, in 1999 to ensure high-quality wastewater treatment services continued to meet the needs of this resort community. Our firm came on board to operate, manage and maintain the wastewater plant and collection system with guarantees to meet or exceed environmental regulations and to assist with capital improvements to the facilities. Under this O&M partnership, Veolia Water completed a \$3 million plant rehabilitation design/build project, which involved the replacement of the barscreen and grit classifier and three primary clarifier chains, flights and drives, installation of covers on the primary clarifiers, installation of a new secondary effluent recirculation line and a new belt filter press.

Veolia Water has also maintained a perfect permit compliance record at the City's wastewater facilities and delivered some \$1 million in annual O&M savings. Most recently, we brought national recognition to Palm Springs in the form of the Outstanding Achievement Award from the National Conference of Mayors for a methane gas recovery program that converts a wastewater treatment byproduct to electricity, reducing plant power costs by nearly \$80,000 per year. In response to California's electric energy crisis and soaring power costs, Veolia Water acquired two microturbine generators through a grant program from the Southern California Air Quality Management District and funded their installation at the wastewater treatment plant. The microturbines efficiently generate electricity onsite from natural gas reducing demand from the local power grid. We have plans to further reduce outside power demand at the plant by converting the microturbines to be powered by methane gas – a free source of fuel created by the natural biological processes used in treating wastewater.

#### **Associated Experience**

Veolia Water has experience in working with clients to implement water, wastewater and CSO projects using innovative delivery approaches. Our firm has executed an industry-leading 40 DBO projects across North America and hundreds more internationally. Projects have included greenfield and replacement plants, as well as multi-million-dollar programs to modernize existing systems. This work has included all aspects of plant design, construction, construction management, acceptance testing and startup. In all instances, Veolia Water utilizes a unique "operations-led" approach to DBO project deliveries, an approach that integrates our unparalleled O&M experience and our experienced professionals into the design/build work from the start of the project. Our O&M and design-build teams work together to drive an efficient and coordinated delivery schedule that ensures a technically reliable process, user-friendly facility, and cost-effective project. The key advantage to our operations-led approach is that the team that is responsible for the long-term compliance of the facility and the ongoing customer satisfaction is the entity that confirms key decisions. As the "internal customer," our O&M group is ideally suited to represent the best interest of the project and the client to ensure a safe, cost-effective, reliable and operationally friendly plant is designed and built. Some key examples of our experience include:

• As a regional water authority and Florida's largest wholesale supplier, **Tampa Bay Water**'s need for new water supply sources was answered by Veolia Water. Our team combined special skills in operations, design and



construction, and water treatment technologies. The first phase of the project was for a 66-MGD water treatment facility. With high levels of customer satisfaction and \$80 million in savings on that single project, Tampa Bay Water's board unanimously approved a contract expansion, expanding the plant to 120-MGD capacity, making the project among the most technologically sophisticated in the world and the largest DBO in U.S. history (shared only with the Seattle Tolt River project). Of note is the project's ability to treat high water variability through our proprietary ACTIFLO® treatment process. Under a separate contract, Veolia Water under separate contracts maintains a Hydrogen Sulfide Treatment Facility, and also manages a 15-billon-gallon raw water reservoir. The project has won multiple awards from groups including the American Water Works Association - Florida Section, the National Council for Public-Private Partnerships, the Associated General Contractors of America and the American Academy of Environmental Engineers.

• In 1998, the **City of Moncton, New Brunswick**, awarded Canada's first major drinking water public-private partnership to Veolia Water. This approach allowed the City to acquire this plant with no up-front capital investment, with our firm providing financing, design and construction of a new 25-MGD state-of-the-art surface water treatment facility. Upon the facility's commissioning in the Fall of 1999, the City purchased the plant, and Veolia Water then entered into a 20-year lease and license agreement with exclusive rights to sell water to the municipality. This \$85 million, fast-track design-build project, was completed in just 500 working days.

#### **Public-Private Partnerships**

Veolia Water has more than 200 public-private partnerships in North America under which we operate, maintain and manage water and wastewater systems and facilities for all sizes of communities, in areas as diverse as: Tampa Bay/St. Petersburg, Florida; New Orleans, Louisiana; Oklahoma City, Oklahoma; Dayton, Ohio; New London, Connecticut; Palm Springs, California; and Vancouver, Washington. Our customers range in size from small communities and resort areas, up to those that serve large cities and regional areas.

The Indianapolis project is one of a number of Veolia Water projects in North America and internationally that has earned certification from the International Organization for Standardization (ISO). Indeed, our firm has established a new standard for water utility excellence, with our specialists completing the rigorous program required to achieve ISO 9001 and 14001 certifications — making Indianapolis the only major city in the United States that has achieved both ISO 9001 and 14001 certifications for its water operations, and Veolia Water Indianapolis the first U.S. water company to be simultaneously certified in both.

This project has also been recognized with numerous awards, including: the Outstanding Achievement Award in Public-Private Partnerships from the U.S. Conference of Mayors; Sam H. Jones Award Winner - Mayor's Celebration of Diversity Awards, the Hoosier Water Guardian Award for Outstanding Distinction from the Indiana Department of Environmental Management; the Buyer of the Year Award from the Indiana Business Diversity Council; the Corporate Diversity Award from the Marion County Bar Association; Spirit of Philanthropy Award from Indiana University-Purdue University School of Science; and Corporate Sponsor of the Year award from Keep Indianapolis Beautiful.

In Berlin, where Veolia Water operates the water and wastewater systems under a 28-year agreement that represents Germany's largest ever public-private partnership of this type, the meter reading program has received ISO 9002 and 14001 certifications, the engineering and construction services group has received ISO 9001 certification, the drinking water distribution program is ISO 14001 certified, and ISO 14001 certification was awarded to the wastewater treatment plants in 2001 and renewed in 2004. Additionally, at Adelaide, Australia, Veolia Water is part of a joint venture (JV) which is the largest private water company operating in Australia and New Zealand. In 1998, this was the first company in Australia operating water and wastewater treatment plants to achieve ISO 9001 and ISO 14001 certification.

#### **Financing Models**

Veolia Water has worked with municipal and industrial clients throughout the world to identify, develop and implement innovative project financing approaches for the lease/ownership and management of water and wastewater systems and facilities. The focus of these efforts has been on providing the funding needed to bring a project to reality without unduly burdening the people that it serves. Several of the reference projects highlighted in this submittal demonstrate this experience, including:

• Shanghai-Pudong, China - Veolia Water is a partner under a pioneering JV with the government of China for the water infrastructure that serves one of the largest urban areas in the country. The Shanghai-Pudong Veolia Water



Corporation Limited (SPVWC) became China's first public-private partnership in the water industry. Pudong is the only area in Shanghai served by a public-private joint venture. Veolia Water purchased a 50% share in a new JV company, Shanghai-Pudong Water Corporation, for an amount of over \$352 million, and has a 50-year license to operate the facilities.

- Scottish Water Solutions Limited This is one of the largest public-private partnering agreements of its kind. Scottish Water is the majority owner with 51% of the shares, with the balance owned by Veolia Water Outsourcing Limited and six other companies under two consortia. All of Scottish Water Solutions activities are directed towards supporting Scottish Water in delivering its capital investment program. Scottish Water is the fourth-largest water and wastewater services provider in the United Kingdom, and at £1 billion, it is in Scotland's list of top 20 businesses.
- Cranston, Rhode Island In 1989, the City selected Veolia Water to provide full-service O&M for the wastewater system, and in 1997 the scope of this contract was expanded to a 25-year lease transaction for the City's entire wastewater system. Veolia Water and the City broke new ground when they implemented this landmark transaction for our operation of City's entire wastewater treatment system. Seeking resolutions to numerous consent orders and lacking resources, expertise and staff to operate and maintain its wastewater treatment plant, the City of Cranston called upon the expertise of Veolia Water.

Following 10 years of successful O&M, during which time our firm restored facility compliance and implemented its acclaimed O&M, safety and quality assurance programs, the City awarded Veolia Water a new Total Asset Management contract which involved implementing sweeping improvements to the 20.2-MGD treatment plant to restore compliance and meet stringent new federal requirements for biological nutrient removal, using a DBO delivery approach. The 2002 capital program included improvements to the plant's SCADA and CMMS, allowing for improved monitoring as well as control of a number of plant processes and equipment. It is being interfaced with a new enterprise asset management system from SPL®, which tracks all plant equipment and generates preventive maintenance work orders. In a new initiative to reduce power costs at the facility, Veolia Water's regional Capital Program Management group and plant staff are working with a local engineering firm to design a cogeneration system for the Cranston project. Exhausts from the two incinerators will be collected to power turbines that are expected to generate 1 megawatt of power, which will meet about 50% of the project's electricity demand. The system is anticipated to be online in the summer of 2010.

#### **Local Contracting Partners**

Veolia Water, in our work with the City of Indianapolis and other communities across the U.S., has demonstrated a strong commitment to buying locally and providing subcontracting opportunities for woman-owned (WBE) and minority-owned (MBE) business enterprises, as well as for Veteran's owned and other classes of small and disadvantaged businesses. A major portion of Veolia Water's contract with the City of Indianapolis is devoted to capital improvement projects, which includes self-performing capital projects and managing the work of design and construction firms that work as direct subcontractors to our firm, in line with the City's goals for project participation by local and disadvantaged firms.

Veolia Water has achieved 35% involvement by minority and woman owned firms under the water contract—twice the level that the contract requires and five times the level under previous management.

Veolia Water's subcontracting approach for this project has involved a significant enhancement of the roles played by MBE and WBE businesses; and we have significantly exceeded our commitments with respect to MBE and WBE participation under this contract.

More than \$175 million (estimated) of capital work has been completed to date (ranging in annual value from \$12 million to more than \$49 million over the past six years. These projects were completed on time (90% average) and on budget (100%), and involved managing a diverse group of in-house engineering, construction and operations resources, as well as multiple subcontractors.

Veolia Water has an equally strong program in place in Milwaukee, Wisconsin, where hawse have committed to a 20% objective for MBE, WBE and small business project involvement for dollars spent annually on controllable outside expenditures, and the goal is to achieve 30% or better during the first five years of the contract term. The company also seeks to meet or exceed the targeted 88% of all controllable expenditures with vendors within the greater Milwaukee area.



Another example of Veolia Water's commitment in the area of MBE and WBE program involvement is our work under a contract with the **Atlanta-Fulton County Water Resources Commission, Georgia**. That project, involving the O&M of a 90-MGD regional water plant, includes a JV partnership with a local MBE partner for operations support, a maintenance partnership with a local WBE firm, as well as relationships with other qualified local firms in key project roles. In fact, the current level of MBE/WBE involvement is approximately 35%.

Veolia Water also has an established a Supplier Diversity Program that demonstrates our strong and proven commitment to diversity in all aspects of subcontracting on other governmental and industrial projects. The program's national focus is targeted at maintaining a vendor database that allows us to meet municipal and industrial project needs by drawing from a diverse pool of prequalified subcontractors and ensuring the widest possible opportunity to all classes of MBE, WBE and other class of small and disadvantage firms to participate.

The company Web site, <u>www.veoliawaterna.com/supplierdiversity</u>, provides information on the diversity program, a mission statement, as well as background and testimonials about Veolia Water's commitment to supplier diversity.

Veolia Water is also a corporate member of the National Minority Supplier Development Council (NMSDC), which is a private organization that currently matches more than 15,000 minority-owned businesses (Asian, Black, Hispanic and Native American) with member corporations that want to purchase goods and services. Through our affiliation with this organization, Veolia Water has access to the NMSDC's database of certified minority suppliers.

#### **Environmental Sustainability and Stewardship**

Veolia Water's work here in Indianapolis as the City's water operations partner has demonstrated our commitment to environmental sustainability and stewardship, with research and development partnerships.

Prior to Veolia Water's arrival, water taste and odor problems had plagued some Indianapolis consumers for more than 100 years. The City and Veolia Water invested in plant upgrades, and we engaged Indiana University-Purdue University Indianapolis (IUPUI) in an aggressive research and development project to create a model of excellence in drinking quality and also explore water taste and odor issues. In addition, our 20-year partnership with IUPUI/CEES has already resulted in providing leadership to State regulators in addressing algal toxin issues, establishing a public website for reservoir monitoring, as well as the construction of legislation to reduce nutrient loading to the reservoirs.

Integrated education efforts with IUPUI have directed watershed stewardship, assisted in the award of over \$100,000 in state and federal grants for grass roots environmental efforts and the creation of targeted watershed management plans. "Discovery Science of the Environment," an educational trailer with high-tech capabilities supported by Veolia Water is successfully visiting thousands of students. Collaborative efforts with the U.S. Environmental Protection Agency, the U.S. Geological Survey and the U.S. Department of Agriculture continue to monitor watershed impacts and the effectiveness of the best management practices in targeted areas.

We have also formed similar kinds of partnerships with communities across the globe. In Berlin, as an example, Veolia Water established a Center of Competence for water and wastewater (research, training and scientific exchange), and R&D center. The work of this facility has included developing a specific R&D project on enhanced phosphorus removal, including bench/pilot scale and prototype work linked to very low phosphorus levels in the treated water (50 ppb and below). The Berlin operations group is investigating the implementation of a full-scale enhanced phosphorus removal treatment system at one of its wastewater facilities.

Additionally, Veolia Water's contract in Adelaide, Australia, ranked as the largest private water company operating in the country, undertakes extensive R&D activities to improve water and wastewater quality and is a key node in the international research and development network of our company. We are also strongly committed to the environment on this and other projects, as documented in the *"Ten Commitments to Sustainability"* developed for the Adelaide project, which focuses on the global responsibility of the firm in terms of working toward sustainable economic, environmental and social development.

Finally, the Veolia Water owned and operated water utility in England, Three Valleys Water, obtained ISO 9002 Quality Management System certification in 1996, Investors in People (IOP) certification in 1998 and National Accreditation of Measurement & Sampling (NAMAS) for the Watford & Staines Water Quality Laboratories in 1997. The company has also been accredited by the National Britannia, Safe Contractor scheme to carry out works on customer's premises



#### Section 3 - References

Veolia Water -Key References Significant Water & Wastewater Partnerships U.S. and Internationally

#### Water/WW Concession - Berlin, Germany

Due to language differences facilitator for reference: Mr. Lionel Gommery, Senior Vice President (former Technical Deputy Director at Berlin) Veolia Water North America Operating Service, LLC Indianapolis, Indiana
Telephone: (317) 917-3726 - Fax: (317) 987-7571
E-mail: lionel.gommery@veoliawaterna.com

#### Wastewater O&M - Milwaukee, WI

Mr. John Jankowski, Contract Compliance Manager Milwaukee Metropolitan Sewerage District Milwaukee, Wisconsin <u>Telephone</u>: 414/225-2256 E-mail: jjankowski@mmsd.com

#### **Scottish Water Solutions**

Mr. Geoff Aitkenhead, Assets Director Scottish Water and Chairman of Scottish Water Solutions Board Scotland (joint venture company 51% owned by Scottish Water) Telephone: +013 83 84-8471

#### WWTP O&M & Capital Upgrades - Wilmington, DE

Mr. Kash Srinivasan, Commissioner, Public Works City of Wilmington - Department of Public Works Wilmington, Delaware

Telephone: 302/576-3070 - Fax: 302.571.4579

E-mail: ksrin@ci.wilmington.de.us

#### Water/WW Contract - Adelaide, Australia

Mr. John Ringham, Chief Operating Officer South Australia Water Corporation Adelaide, South Australia, Australia <u>Telephone</u>: +61 8 7424 1821 <u>E-mail</u>: john.ringham@sawater.com.au

#### Water Operations Partnership - Indianapolis, IN

Mr. Matthew Klein, Executive Director City of Indianapolis, Department of Waterworks Indianapolis, Indiana Telephone: 317/263-6567 - Fax: 317/263-3968

E-mail: matthew.klein@indygov.org

#### **Shanghai-Pudong District, China**

Shanghai Water Assets Co. and Shanghai Water Authority, Shanghai China *Due to language differences facilitator for reference*: Ms. Samantha Bowles, Communications Director, Veolia Water Asia Pacific, Hong Kong Telephone: 852-9839-0258 - Fax: 852-2167-8191 – E-mail: samantha.bowles@veoliawater.com.hk

#### Three Valley Water, England

Mr. Mike Pocock, Head of Strategic Planning Three Valleys Water PLC, England <u>Telephone</u>: +44-(0)208-420-5850 <u>Fax</u>: +44-(0)-1923-814-398 E-mail: Pmike.pocock@3valleys.co.uk

#### New Water Reclamation Plan - Honolulu, HI

Mr. Barry Usagawa, Principal Executive, Water Resources Division, Honolulu Board of Water Supply, Honolulu, Hawaii <u>Telephone</u>: 808/748-5900 - <u>Fax</u>: 808.748.5929 E-Mail: busagawa@hbws.org

#### Water Treatment Plant DBO - Moncton, Canada

Mr. Ensor Nicholson, P.Eng.
Director of Water Systems
City of Moncton, New Brunswick, Canada
<u>Telephone</u>: 506/859-2667 - <u>Fax</u>: 506-853-3543
<u>E-Mail</u>: ensor.nicholson@moncton.ca

#### New Water Plant & Expansion - Tampa Bay Water

Tampa Bay Water Clearwater, Florida <u>Telephone</u>: 727/791-2335 - <u>Fax</u>: 727/791-2388 <u>E-mail</u>: ccarden@tampabaywater.org

Mr. Charles H. Carden, Jr., Project Manager



#### Section 4 – Potential Structures

Veolia Water has partnerships under virtually all public-private partnership models. In this section we share how that experience can be brought to bear within the context of the City's objectives.

# (a) The Combined Operation of the Wastewater and Waterworks Systems

It appears from the REI that the City is considering transferring the water and wastewater treatment assets to a non-profit, taxexempt entity in order to free-up capital that could be used for other infrastructure needs. Therefore, we provide an innovative Did you know?

Veolia Water Indianapolis is viewed in the water industry as an excellent utility, a model that others have sought to follow.

structure in Section 8 that will meet this objective in a very competitive and attractive manner. However, in this section we are requested to address the potential structures that are plausible, and we address three potential structures:

- 1. **Combined Waterworks and Wastewater Non-Profit Corporation Structure** In Section 8, Veolia Water further describes its suggested partner option that provides a structure with:
  - Synergies from combined waterworks and wastewater operations.
  - CSO and other capital improvements conducted on a "faster, better, cheaper" basis.
  - Public tax-exempt debt capability.
  - Significant MBE, WBE and Veteran-owned business opportunities.
  - Local job creation and retention.
  - The ability to reach environmental compliance earlier with sustainable construction.

In addition, we believe that there are opportunities to monetize the synergies and capital savings to address the significant infrastructure needs of Indianapolis as the economic engine for the City and surrounding communities.

2. **Leverage the Status Quo** - Veolia Water believes that while this option has merit in theory, its practical application would likely not satisfy all of the City's requirements as defined in the REI. In particular, the City would be less likely to capture value in the form of an upfront payment, or to have certainty of future efficiencies. Veolia Water's recommended path forward is discussed in Section 8.

There are likely significant costs involved in unwinding the existing operations and management contracts for both the water and wastewater systems. However consideration may be given to optimizing the "status quo" within these agreements. Under this option, we would envision a governance structure (this may require legislative approval) whereby the City oversees and manages both partnerships through one City department – not two departments. Many synergies that may be realized by combined operations under one private-sector entity could be realized in a very cost-effective manner through this option. Veolia Water has presented concepts and concrete ideas that could be incorporated under this option to the advantage of the City's ratepayers in Section 5.

In any event, Veolia Water remains committed to providing the best value to the City in its present operations. We are open to further discussions and refinements of the scope of the present contract with the City to improve the Waterworks operations and achieve mutual benefit for the City and Veolia Water.

3. Competitive Process for Management of the Water and Wastewater Systems - This option would allow the City to check the value it receives from its contracting partner and possibly derive more synergies. However, it would make it difficult to capture value in the form of an upfront payment. Veolia Water would also argue that the City is already receiving very good value from its O&M contractors, and a new competitive scenario under a similar partnering structure (even modified to combine operations) may not bring as much value as a new project structure. Veolia Water does not recommend that the City follow this path, but in the spirit of discussions as part of the REI process, we provide the following considerations.

Under this option, the City would re-compete the current water and wastewater contracts if it can be determined that the potential synergies outweigh the "unwind" costs, as noted above. In addition, we suggest that certain services currently provided by the Department of Public Works could be added to this procurement process. For example, Veolia Water is at the cutting-edge with respect to asset management practices for underground



infrastructure, which means we can make extremely attractive proposals for managing underground infrastructure with significant risk transference in the most cost-effective manner by making life-cycle cost decisions between capital investment and maintenance. It is quite doubtful that the actual savings from synergies would outweigh the costs associated with a new procurement.

# (b) Wastewater, including CSO, Capital Improvements that Advance the City's Objectives as described in this REI

1. Wastewater Non-Profit Corporation Structure – As highlighted and summarized above in Section 4 (a), we are suggesting a Combined Waterworks and Wastewater Non-Profit Corporation Structure (as detailed in Section 8) as the preferred option to create the most value for the City based on guidance from the EOI. Our proposal for the combined system outlines separately the structures for both the Waterworks and Wastewater Systems based on their unique differences for debt and IURC regulation. As such, there are options to execute our proposed structure in pieces.

We believe that any solution that provides an opportunity to monetize operational savings and capital cost avoidance is best served in a capital and operating partnership. We also believe that our suggested structure could be modified to include only corporate structure changes to the Wastewater System including execution of the significant Wastewater System capital improvements and/or CSO improvements.

Since we are uniquely structured with a capital execution capability under our Waterworks contract, we could execute the Wastewater system proposal in Section 8 on a stand-alone basis and modify our existing Waterworks contract to facilitate combined utility synergies for Wastewater System operations and add capital savings via our existing capital management terms of the Waterworks contract for Wastewater System capital and/or CSO capital needs. We can also work with the existing Wastewater System operator with appropriate changes to contracts.

We believe that there are adequate opportunities to monetize the synergies and capital savings in this partial execution of our plan, providing the combined utility operational synergies, and reducing transaction costs and time to implement the strategy with the capital savings for the Wastewater System included or separated from the CSO capital execution to facilitate implementation efficiency.

- 2. Leverage the Status Quo Veolia Water's introductory comments to the Water section, above, also apply to this Wastewater approach. Under this option, we would expect the DPW to continue to provide overall management of the wastewater and CSO capital improvement programs and selectively use the private sector in a design-build or design-build-operate format to introduce significant competition to maximize efficiencies and risk transference. This model is well understood and used to significant advantage around the country.
- 3. **Integrated Partnerships** Veolia Water has considerable experience with this form of partnership and we believe it should be strongly considered as part of this process as a unique way for the City and its private partner to work together. This approach can be combined with the overall structure we recommend in Section 8. In other similar situations (that require large capital investments), some jurisdictions have entered into integrated partnerships with the public and private sector working as an integrated team. Many Veolia Water projects (such as Scottish Water Solutions, one of the reference projects discussed earlier) provide examples of how the public sector maintains control of the overall partnership while having a unified team of public and private-sector personnel manage the day-to-day responsibilities. The advantage of this model is that it incorporates the best of both the public and private sectors while ensuring continued involvement of personnel that may have engineered the project from its inception. The model also incorporates private-sector capabilities and experience that allows for significant cost control and risk tolerance. An integrated partnership built around the wastewater capital and CSO programs would yield the following benefits:
  - Joint team of personnel seconded by both the City and the private sector, working together.
  - Continuity in institutional knowledge of the CSO program by maintaining the City's personnel involved in that program.
  - Addition of private sector personnel to constantly value engineer parts of the CSO program even as some of its components are already being implemented.
  - Lower cost and more efficient delivery resulting in decreased opportunity for schedule delays.
  - Risk transfer through sharing of certain cost overruns and other issues.



## Section 5 – Potential Synergies

Within this section, we provide an overview of synergies that can be achieved, and also outline how our technical approach in the operation of Indianapolis Water has produced savings that benefit the ratepayer, and how the current Management Agreement for the water operation can be modified to capture further cost savings.

The search for operating synergies between the water and wastewater utilities dates back to the mid-1990s and has centered around the various procurements for contract operations of each utility. Historically, these synergies have been sacrificed in favor of keeping operations of the utilities segregated. Until 2008, there has never been a fruitful discussion of how to organize the two

Did you know?

Veolia Water has invested
\$20 M in the water system,
costs that are not recovered in
our fee, in order to improve
efficiency and effectiveness.

utilities under a single governance structure capable of coordinating the activities of two separate operating partners to capture the natural synergies that can result.

Further, past studies have neglected to consider synergies that could be achieved by broadening the scope of existing Public-Private Partnerships to include other services (public transportation, municipal building management, trash collection and capital program management of all municipal infrastructure investments) beyond water and wastewater.

Veolia Water is in the unique position of having the capabilities in all of these areas to fully investigate these synergies, quantify them, and ensure successful implementation. Once these synergies are fully accepted by the City, it is conceivable that we can monetize them through a Public-Private Partnership.

Most recently, Veolia Water has worked with the City to revisit the water and wastewater synergies we identified as a part of our 2007 Proposal to operate the wastewater treatment facilities, which was the result of extensive due diligence and therefore based on a comprehensive understanding of the system. We also incorporated synergy ideas that would broaden the scope to areas identified in the previous paragraphs. These ideas have been discussed and updated in the past two years by Veolia Water and shared with the City. In this section, we will again discuss synergies that have been identified and quantified, as well as briefly outline other ideas that require further review. Examples of synergies that could be realized include:

- Coordination of capital planning to ensure that construction crews are replacing/repairing water mains and sewer lines so that roads, etc., are only tore up and refurbished once. This coordination should also be tied to road, sidewalk and curb repair and rehabilitation priorities.
- Elimination of certain spares, including a truck, a front-end loader and a backhoe, for savings of approximately \$500,000.
- Use of the same pick-up trucks for collection and distribution system activities, for savings of approximately \$80,000.
- Reduction of the quantity of pool cars, for savings of approximately \$60,000.
- Economies-of-scale can be achieved through the reduction of costs associated with chemicals, consumables, maintenance contracts and other products and services purchased by both the water and wastewater operations. Potential savings of \$300,000 can be realized annually
- Additional annual energy savings associated with installing energy efficient equipment of \$300,000.
- Other savings will be realized as the communication and coordination between the service providers is improved and each better understand the other's operation.
- Reduction in oversight costs through streamlined responsibilities for an annual savings of approximately \$3 million.

#### Other Potential Synergies

Veolia Water, throughout the document, has identified a list of major synergies that are outside of the current scope of the water and wastewater services contracts, and these include:



- Working with the City on energy procurement approaches and plans, using the resources that we have provided to other large cities a Strategic Energy Advisor type of approach. Audit of existing municipal facilities and energy management programs to identify immediate economies.
- Consolidated capital program management.
- Consolidated waste collection and management
- Grey Water reuse
- IndyGo Public-Private Partnership to bring private sector efficiencies and effectiveness to this important City service
- Integrating and financing new technologies, acquisition and financing of new rolling stock, and outsourcing of fleet maintenance.
- Downtown Transit Center Public-Private Partnership
- Financing through a long-term Public-Private Partnership approach.
- Assistance with the planning and development of this long-proposed transportation hub.
- Light Rail System
- Operation, maintenance and management of operations for this proposed new system.
- Fleet Management Public-Private Partnership.
- Routine inspection of booster stations, groundwater treatment plants and lift stations.
- Monitoring of stream conditions for water quality and CSO outfalls.
- Infrastructure maintenance tasks, including leak surveys for the water facilities, in conjunction with sewer cleaning and televising, as well as infiltration/inflow (I/I) evaluation.
- Abandonment of orphan services to vacant lots for both water and sewer.

Most of the available costs savings which are unique to the operation of the water utility have already been captured. This is evidenced by the fact that in 2001 when Veolia Water assumed operation of the water utility, the total direct operating cost associated with the scope of the operating agreement was approximately \$55 million. In 2008, seven years hence, this same operating cost was \$50.3 million, while at the same time providing much greater benefits that may come from a world-class operation. We are also still working on achieving additional power savings, as well as examining how we manage power usage (see Figure 5.1).

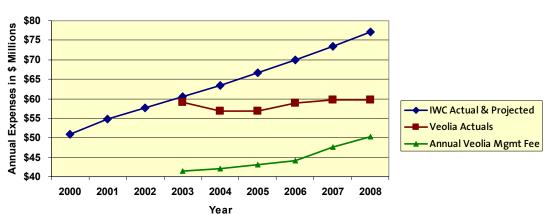


Figure 5.1 - Annual Operations & Maintenance - Indianapolis Water Comparison of IWC and Veolia Water O&M and Management Fee

#### NOTES:

- 1. The costs are based upon operations and maintenance only.
- 2. DOW administrative costs are not included.
- 3. Capital project costs are not included.



Veolia Water's ability to reduce and contain operating costs is directly related to our technical abilities, global expertise and managerial processes. In this regard, Veolia Water Indianapolis has made significant improvements to the drinking water system, as demonstrated by the dramatic reduction in taste and odor complaints received since we began operating the system--there were 501 taste and odor complaints in 2001 and 19 recorded in 2008. In addition, customer satisfaction now exceeds national water utility standards, employee safety is at a 10-year high, and numerous community organizations have benefitted, including IUPUI through a \$5 million R&D program. These same skills can be brought to bear in containing costs and achieving world-class operational effectiveness over a broader scope of municipal services if the appropriate structure and governance of a combine utility is established. Hereto, the value of these savings will inure to the citizens of the City either through minimizing rate increases or by providing internally generated funds for infrastructure replacements and improvements.

Many of the challenges faced when evaluating potential synergies are sourced in the scopes, terms and conditions of the current management agreements. The current management agreements for the wastewater utility and the water utility demonstrate drastically different breadth of scope, different compensation mechanisms, differing service objectives and governance mechanisms. Certainly, these differences have resulted in a lack of cooperation between governing entities as well as the managing partners.

#### Cost Savings through Revisions to Our Current Public-Private Partnership

Veolia Water has expressed our support for this REI initiative, and in this submittal we reiterate that support. In this spirit, we offer suggestions to provide immediate relief on water rates and potential opportunities to reduce operational costs that will accrue savings to the ratepayers in an expedited manner with the least possible costs to the City.

By almost any measure the current waterworks is operated and managed to the industry's highest standards. Comparing the Indianapolis waterworks to industry benchmarks over the term that we have operated the facilities (see Figure 5.2 at the top of the next page), you will find very high levels of performance that we assume the City and Indiana Utility Regulatory Commission (IURC) will not want to sacrifice for cost savings. Therefore, we investigated the possibilities to modify our current agreement without compromising critical service levels currently provided, but evaluating some of those that may not be deemed critical by the City at this juncture, recognizing that the drivers that were in existence upon the bidding of the management agreement may not be the same as they are currently, and understanding that contract modification concepts could be explored.

The current agreement is innovative and performance-based. It is comprised of a fixed and a performance-based compensation system. The incentive fee consists of the six Incentive Criteria, which are divided into thirty-seven subcomponents. The standards set-forth in these incentive criteria were created to ensure that Indianapolis Water was managed and operated as a world-class water utility. The actual management and achievement of the current incentives is very costly, requiring a significant amount of personnel and systems to ensure their achievement. In addition, the existing benchmarks for many of the incentives are significantly above industry standards.

Veolia Water suggests that the current benchmarks be reviewed and modified to reflect an appropriate level and integrated as part of the agreement, modifying the fixed fee and removing the incentive-based compensation. This could result in a significant savings for the City.

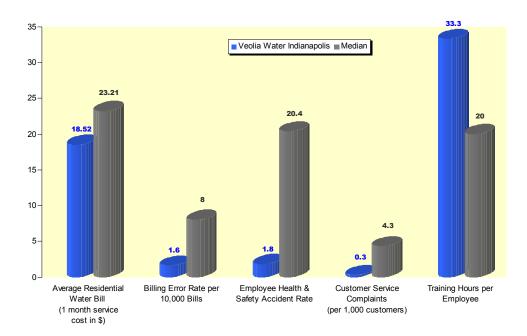
#### **Additional Concepts**

The current agreement also requires various other investments by Veolia Water, which were in the original contract. These investments need to be reviewed in depth to determine whether the benefit outweighs the costs, or if other drivers have changed. These additional costs include:

- The annual investment in Research and Development. This is required under the current framework and could be modified to assist with financial relief.
- Charitable contributions are required, per the management agreement. Water Wise and conservation education programming is costly to the operation and could be removed to allow for rate relief.
- Extensive insurance requirements are currently required and may be found to be excessive in terms of coverage.
- The current agreement requires a \$40,000,000 Letter of Credit as security for performance. This is very costly and could be replaced with a Performance Bond more typical of these types of partnerships at reduced cost.

The above concepts are a few of the avenues available for the parties to quickly investigate and potentially implement.





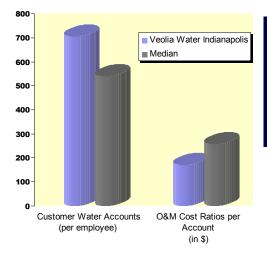


Figure 5.2
Veolia Water Indianapolis
Performance vs.
Industry Standards
Sources:
Qualserve Performance Indicators for
Water and Wastewater Utilities 2007

# Section 6 – Proposed Cost Effective Solutions & Procurement & Contract Models Capital Program Management

Given the significant critical spending needs that the City of Indianapolis (the "City") has identified with respect to its waterworks and wastewater infrastructure, the city should take advantage of any affordable market access today and apply those proceeds to offset anticipated needs. Liquidity is the scarce commodity in today's financial markets, and securing funding in advance of financing requirements will provide the city with more flexibility and confidence in its ability to weather further challenges and constraints in the market.

The City may choose to take advantage of certain provisions of the American Recovery and Reinvestment Act ("ARRA").

Specifically, there are tremendous opportunities to realize cost-effective financing in the taxable market through the Build America Bonds program and the Recovery Zone Bonds program.



#### **Build America Bonds**

The Build America Bonds ("BABs") program allows governmental issuers to sell bonds which would otherwise be taxexempt as taxable bonds, without size or structure limitation, and receive a subsidy for 35% of the interest costs from the Federal Government. Currently, BABs may only be issued prior to the December 31, 2010 program expiration date, and must be issued for the financing of capital expenditures. In the current market, issuing BABs could achieve three primary advantages over a traditional tax-exempt issue:

• First, the program has allowed borrowers to achieve significant savings after considering the Federal subsidy. As shown on Table 6.1 (which follows), the savings from BABs results in real savings (over 100bp) to rate payers over the life of the bonds.

Table 6.1 - Comparative Financing with 30-Year Bullet Structure			
Parameter	Taxable	Tax-Exempt	
Call Provisions	Make Whole	10-Year Par	
Benchmark	30-Year US Treasury	30-Year MMD	
Benchmark Yield	4.34%	4.57%	
Credit Spread	1.50%	0.40%	
Offered Yield <sup>(1)</sup>	5.84%	4.97%	
Less (35% Tax Credit Subsidy)	2.04%	n/a	
Net Interest Cost <sup>(2)</sup>	3.80%	4.97%	
(1) Indicative rates based on the wastewater credit as of August 17, 2009.			

- Second, BABs provide critical diversification for funding away from the capital constrained tax-exempt investor base. One way in which the BABs program has achieved significant interest rate benefits for municipal issuers has been providing access to the deeper pool of capital available in the taxable investment grade market, which is comprised of \$6 trillion in outstanding debt. In comparison, the current municipal market, which is comparatively undercapitalized due to the recent deleveraging of some types of municipal investors (such as tender option bond investors) and the exit of the monoline bond insurers over the past year, has only \$2.7 trillion of outstanding debt.
- Third, the taxable markets would be very accommodating to a long-dated structure (30-40 years) that, in conjunction with capitalized interest, would mitigate strain on asset cashflows prior to fully realizing net revenue increases due to rate modifications and operating synergies.

#### **Recovery Zone Bonds**

The ARRA also provides for \$25 billion in bonds available under the Recovery Zone Bonds program. Recovery Zone Bonds are targeted to promoting economic development projects, such as those proposed by the City for waterworks and wastewater infrastructure, in areas particularly affected by job loss.

The program is divided between a \$10 billion provision for Recovery Zone Economic Development Bonds ("RZ-EDBs") and \$15 billion for Recovery Zone Facility Bonds ("RZ-FBs").

- RZ-EDBs function similarly to BABs, although unlike BABs there is a size limitation (as outlined below.) For RZ-EDBs, the interest cost subsidy from the Federal Government is 45%, relative to 35% for BABs.
- RZ-FBs are a type of traditional tax-exempt bond that may be used by private businesses in designated recovery zones to finance depreciable capital projects.

Table 6.2, which follows, outlines the RZ-EDB and RZ-FB allocations for Indiana and areas in which the City's waterworks and wastewater system operates.

The surety market continues to be challenging due to downturn in the economy. While surety bond rate are holding steady & capacity is plentiful, underwriters are being extra cautious in competitive bids. Surety executives have begun to see more claims activity, particularly from small construction firms. Claims are expected to increase in 2009, 2010 and 2011. As claims begin to increase, the rates and availability of surety bonds will certainly be affected.



Table 6.2 - Recovery Zone Bonds Allocation			
System Asset	RZ-EDB	RZ-FB	
State of Indiana	\$313,081,000	\$469,621,000	
Indianapolis (Consolidated)	34,158,000	51,237,000	
Indianapolis (Incorporated)	33,753,000	50,630,000	
Hamilton County	11,592,000	17,389,000	
Johnson County	5,993,000	8,990,000	
Marion County	3,109,000	4,663,000	
Boone County	2,289,000	3,434,000	
Note: For a full list of allocations in the State of Indiana, please refer to:  www.treas.gov/press/releases/docs/rzballocation-local_AR-ZS.pdf			

The current construction insurance marketplace is very competitive both in terms of pricing and coverage. While insurance carriers incurred significant losses in 2008, the down year followed two consecutive years of record profits for the industry. This has helped keep overall pricing low. Further, policyholder surplus remains strong and the delay, cancellation and abandonment of planned construction projects globally leaves carriers holding ample amounts of untapped capacity. Veolia Water is uniquely positioned to capitalize on these opportunities by offering the City creative, comprehensive and cost-effective risk management and insurance solutions. An example relative to the proposed project is Veolia's ability to offer enhanced course of construction (builder's risk) coverage at a fraction of the cost typically available in the insurance market. Further, Veolia's ability to continue insuring the capital improvement assets post-construction eliminates the potential exposure associated with gaps in coverage that might occur when a project transitions from builder's risk to permanent property insurance.

Veolia Water is the leading provider of water and wastewater services in North America and the world. As the world's largest construction broker, Willis handles more wrap-up and surety placements than any other broker. Thus, Willis and Veolia enjoy an unmatched position in the construction insurance marketplace. This results in the best possible terms, conditions and pricing for Veolia and its customers.

Most certainly the recent economic down turn has had significant impact on the construction industry. The general perception is that the economic environment has resulted in benefits to public works projects by driving down bid margins and increasing the number of bidders competing for projects. Veolia Water has experienced this trend during its construction bidding activity around Indiana. While there are opportunities presented by the market, there are also serious risks. A recent issue of the *Engineering News Record* entitled "A Strong Market Still Has High Risks" (June 29,2009), states in part that the bad news is that low bids from bidders desperately trying to survive pose long-term, difficult – to – manage increases in risk for owners... Among the risks noted in the article include bidders seeking projects beyond their level of capability, substandard materials and construction, and bidders going bankrupt before projects are completed. Also, the construction industry has noted an increase in the number of bid protests that have delayed projects and increased the cost of the project.

Industry publications have noted that there has been a general restriction in available credit to contractors in the last 12 months. Lenders are rethinking the terms under which they are willing to renew lines of credit. This stems from contractors' reduced profitability.

Veolia Water has international experience in capital program management structures that take advantage of the opportunities presented in the market as well as transfer or mitigate the risks posed. All of these structures are based upon partnership between owners, designers and constructor designed to allocate the project risks to the partner best able to manage them. The details of the various structures cannot be fully described within the scope of this EOI. However, Veolia Water is prepared to fully discuss the attributes and advantages to the various structures in the next phase of this process



#### Section 7 – Risk Matrix

In this section, Veolia Water provides our suggested Risk Matrix to illustrate a proposed allocation or sharing of risks:

- a) As between the City and strategic partner under a long-term contract related to the combined operation of the Wastewater and Waterworks systems; and
- b) As between the City and strategic partner with respect to the Waterworks and Wastewater, including CSO, capital improvements.

Table 7.1 (next page), provides our Illustrative Risk Matrix for the structures outlined in Section 8.

Veolia Water accepted considerable risk in 2002 within its current service agreement that the City may not be able to transfer to the private sector in a combined water and wastewater contract under a public-private partnership. The reason for this is that the private sector, including Veolia Water, has incurred significant losses on contracts signed during the 1990's and early 2000's that have resulted in our industry changing its views of risk acceptance.

For example, Veolia Water currently has the risk and responsibility to pay all electrical costs, covering both the commodity cost and consumption amounts. Since 2002 there have been wide swings in our pumpage requirements due to weather and significant increases in electricity commodity cost that have resulted in significant losses being incurred.

Nevertheless, the private sector will accept considerable risk transference to the benefit of the City as illustrated within this section. This risk transference has great value as any community bearing cost overruns on significant infrastructure projects can attest to. In the regulation model without a contract operator virtually all risks are maintained by ratepayers.

Table 7.1 – Illustrative Risk Matrix			
		Risk Allocation	
Risk	Description	Combined Water and Wastewater	Combined + Capital Improvements
Owner's Risk	The risk that contracted entities do not meet their obligations and the owner has to step in and take over the responsibility or otherwise enforce its rights.	For Benefit of Corporation , with cost penalties to Operator	For Benefit of Corporation, with cost penalties to Operator
Revenue Risk	The risk that revenue stream is insufficient to pay for operations, maintenance, capital replacement and to repay the financing of the project.	Same as Today	Same as Today
Financing Risk	Financing (public or private) not being available or changes in financial parameters will alter before certain aspects of the project are designed and constructed.	Same as Today	Same as Today
Regulatory Risk	The risk of changing environmental regulations and other laws in a way that changes the project.	Shared	Shared
Design Risk	Process or equipment does not operate as intended.	Design Partner/ Operator	Design Partner/ Operator
Construction Completion Risk	Substantial completion does not meet target.	Private Operator	Private Operator
Construction Cost Escalation	Construction cost increases due to commodity prices, labor markets etc.	Shared	Shared
Inflation	This is the risk of adverse inflation/interest rate movements.	Shared	Shared
Commissioning Risk	Process or equipment does not operate as intended.	Designer, Private Operator	Designer, Private Operator



Table 7.1 – Illustrative Risk Matrix			
		Risk Allocation	
Risk	Description	Combined Water and Wastewater	Combined + Capital Improvements
Performance Risk	Process or equipment does not meet performance guarantees.	Supplier Private Operator	Supplier Private Operator
Operating Cost Escalation	Operating cost increase due to chemical & utility unit price, labor market etc.	Private Operator if contracted as such	Private Operator if contracted as such
Asset Ownership Risk	This includes the risk of maintaining the asset to the requisite standard (including the risk that the cost of maintenance may increase during the term) and the risk of premature obsolescence.	For Benefit of Corporation and sometimes Operating Partner, depending on contract	For Benefit of Corporation and sometimes Operating Partner, depending on contract
Force Majeure	The risk of an event or effect that cannot be reasonably anticipated or controlled.	Same as Today	Same as Today
Consequential Damages	The indirect costs associated with some impairment (delay for example) of the project implementation that would typically be awarded through a third party claim.	Same as today	Same as today

## Section 8 - Suggested Partnership Options

#### Introduction

This section will outline proposed structures for the acquisition, lease, ongoing operations and financing of ongoing capital costs of the Wastewater and Waterworks systems that meet the following objectives:

- (1) Allow all existing bonds of both the Wastewater and Waterworks to remain outstanding, thus avoiding costly financial penalties associated with retiring such debt.
- (2) Provide a mechanism for the acquisition components of the respective purchase prices for both the Wastewater and Waterworks systems (i.e., the amount that the purchase price exceeds outstanding bond debt) to be financed on a tax-exempt basis.
- (3) Provide a mechanism for ongoing capital costs to be financed with tax-exempt bonds.
- (4) Provide for the efficient joint operation of the Wastewater and Waterworks systems by a single operator.
- (5) Retain the Wastewater utility's current exemption from regulation by the Indiana Utility Regulatory Commission (the "IURC").

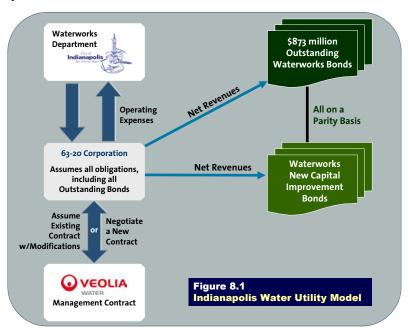
Please note that one of the key advantages of Veolia Water's approach is its flexibility. We recommend an approach that addresses all of the requirements listed in the REI. However, for various reasons, the City may wish to proceed with various components of Veolia Water's recommendation at different speeds, for example wastewater before water. Some of these reasons are a result of the issues addressed in the "Credit Considerations" section below, and a practical example of this flexibility is described in the "Expedited Approach" section of this section 8. Veolia Water is prepared to work with the City to achieve the structure that best addresses its objectives.





#### **Proposed Structure for Waterworks System**

A new 501(c)(3) nonprofit corporation will be created that will also meet the requirements of IRS Rev. Rul. 63-20 and IRS Rev. Proc. 82-26 (the "Corporation"). The City will sell all of the assets of the Waterworks system to the Corporation pursuant to state statute. As a part of the purchase price the Corporation will agree to assume all outstanding Waterworks bonds of the City, which will remain outstanding. This assumption is permitted by the resolution adopted by the Board of Directors of the Waterworks Department on May 21, 2009 (the "Waterworks Bond Resolution"), which amended the governing Bond Resolution to permit a transfer of liability for outstanding bonds to a nonprofit entity acting on behalf of the City. The Corporation, by virtue of its 63-20 status, will qualify as such a nonprofit entity.



Veolia Water has started working on the valuation of the waterworks system and has brought significant resources to the exercise. We will continue to work on this valuation so as to discuss the results with the City at the earliest opportunity.

If the established value (and thus the purchase price) of the Waterworks system exceeds the total amount of outstanding bonded indebtedness, the difference will be financed by tax-exempt bonds issued by the Corporation. These acquisition bonds may be issued on a tax-exempt basis so long as the City reasonably expects to use the sales proceeds derived from the bonds for tax-exempt eligible capital projects within the time periods required by the Internal Revenue Code and related regulations (generally three years from the bond issue date). Future capital needs of the Waterworks system will be financed by tax-exempt bonds issued by the Corporation, which will be issued on a parity basis with outstanding Waterworks bonds assumed by the Corporation (assuming that the required coverage tests for parity bonds can be met). This, too, is permitted by the Waterworks Bond Resolution.

The Corporation will enter into a qualified management contract under IRS Rev. Proc. 97-13 with Veolia that will cover the operations and management of both the Waterworks system and the Wastewater system. (In Section 5, we discuss the potential synergies of the combined water and wastewater operations approach.) Under this proposed structure, it is expected that the Waterworks system will remain subject to regulation by and the jurisdiction of the IURC (as illustrated on Figure 8.1).

#### Proposed Structure for Wastewater System

The Board of Public Works of the City (the "Works Board"), as governing body of the City's Sanitary District (the "District"), will lease all of the assets of the District to the Corporation for a term as agreed with the City (the "Lease"), pursuant to state statute and as permitted by the resolution adopted by the Works Board (the "Wastewater Senior Bond Resolution") authorizing the issuance of its outstanding Sanitary District Revenue Bonds (the "Senior Bonds"). To obtain the leasehold interest under the Lease, the Corporation will pay a purchase price to the District that will be comprised of two components: (1) an agreement to leave all existing Senior Bonds of the District outstanding and to apply net revenues of the Wastewater system to pay debt service on the Senior Bonds, as further described below; and (2) an amount agreed to by the parties as the residual value of the assets of the Wastewater system (i.e., the total value of such assets minus the total amount of outstanding Senior Bonds) (the "Equity Component").

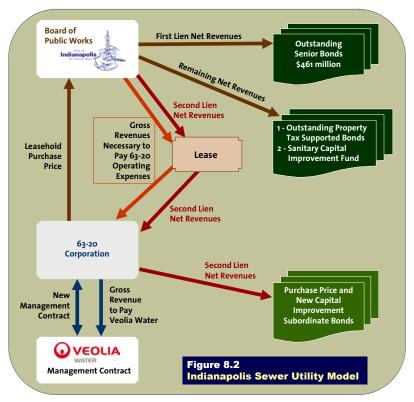
Veolia Water has started working on the valuation of the wastewater system and has brought significant resources to the exercise. Veolia Water will continue to work on this valuation so as to discuss the value of the equity component with the City at the earliest opportunity.

The Corporation will issue tax-exempt bonds to finance the acquisition of the Equity Component. As was the case with the acquisition bonds for the Waterworks system, these acquisition bonds may be issued on a tax-exempt basis so long as



the City reasonably expects to use the sales proceeds derived from the bonds for tax-exempt eligible capital projects within the time periods required by the Internal Revenue Code and related regulations (generally three years from the bond issue date). As further described below, the pledge of net revenues from the operation of the Wastewater system to the payment of these acquisition bonds will be subordinate to the pledge of such net revenues to the currently outstanding Senior Bonds of the District.

Future capital needs of the Wastewater system will be financed by tax-exempt bonds issued by the Corporation, which will also be issued on a subordinate basis to the District's outstanding Senior Bonds, and which will be issued on a parity basis with the acquisition bonds described in the previous paragraph (assuming that required coverage tests for subordinate parity bonds can be met) (such acquisition bonds and bonds to finance future capital improvements issued by the Corporation are hereinafter referred to as the "Subordinate Bonds").



Under the terms of the Lease: (1) gross revenues from the operation of the Wastewater system will be used to the extent necessary to pay the operating expenses of the Corporation and the obligations owed by the Corporation to Veolia pursuant to the management contract described below; and (2) net revenues from the operation of the Wastewater system will first be used to pay debt service on the District's outstanding Senior Bonds, which will remain outstanding after the Lease takes effect. The Corporation, as lessee under the Lease, will have a right to receive all remaining net revenues and apply them to the payment of debt service on the Junior Bonds. Any remaining net revenues: (1) may be applied to debt service payments on the District's outstanding property tax supported bonds, which have been issued to finance certain improvements to the Wastewater system; or (2) deposited in the Sanitary Capital Improvement Fund pursuant to the Wastewater Senior Bond Resolution to help finance future capital improvements to the Wastewater system.

Under the Lease, the Works Board and the District will retain the following rights and responsibilities:

- (1) Each series of Subordinate Bonds issued by the Corporation must be approved by a resolution adopted by the Works Board (each, an "Approving Resolution").
- (2) In each Approving Resolution, the Works Board will state that it will accept title to that portion of the Wastewater system to be financed by the Subordinate Bonds to be issued pursuant to such Approving Resolution upon the discharge of all Subordinate Bonds.
- (3) All increases to rates and charges to users of the Wastewater system must be approved by the Works Board and the City-County Council.
- (4) Any management contract between the Corporation and Veolia or any amendment thereto must be approved by resolution of the Works Board and by the Mayor.
- (5) Any construction contract entered into by the Corporation must be approved by resolution of the Works Board.
- (6) Any member of the Works Board or officer or employee of the City will have access to and the right to inspect any portion of the Wastewater system or the construction of any improvement thereof, consistent with any restrictions included in a management contract between the Corporation and Veolia.
- (7) Upon the termination of the Lease, the Works Board and the District will obtain full legal title to the Wastewater system.



Because the Wastewater system will continue to be owned by the City, and because of the foregoing elements of control retained by the Works Board, the City-County Council and the City, we believe that it is reasonable to conclude that the Wastewater system will remain unregulated by, and will continue to not be subject to the jurisdiction of, the IURC.

As noted in the previous section, the Corporation will enter into a qualified management contract under IRS Rev. Proc. 97-13 with Veolia that will cover the operations and management of both the Waterworks system and the Wastewater system. In Section 5 of this submittal we discuss the potential synergies of the combined water and wastewater operations approach. Figure 8.2 shows the proposed sewer (wastewater structure).

#### Suggested Legislation

Our research suggests that under current law, any proceeds received by the City from the lease of its Wastewater assets (regardless of whether the purchaser is a political subdivision or a nonprofit corporation) may not be transferred to the City's general fund, but must be retained in the Wastewater system and used for Wastewater purposes. If the City wishes to use the Equity Component of the purchase price for broader purposes, we would recommend that the City pursue legislation that would specifically allow the proceeds to be deposited into the City's general fund. Current law permits such a result for "sales" by municipal utilities operating under IC 8-1.5, so it would not be a stretch for the City to seek to have the same rights extended to it for purposes of this proposed structure.

#### **Credit Considerations**

While the economic underpinnings and fundamental demand measures for these two systems are similar, debt leverage and rate setting flexibility differ considerably. These differences directly impact credit quality and hence the credit ratings.

The bonds issued by the Indianapolis Sanitary District currently provide much stronger credit quality than those issued for the Waterworks Project. These credit quality differences are also reflected in the credit ratings, AA+/A1 for the Wastewater bonds and AA-/A3/A- for the Waterworks bonds. Over time, however, it is likely that rating and credit quality disparity between these systems will lessen. An opportunity may exist to put additional leverage on the Wastewater system while limited debt capacity exists at the Waterworks system.

The Wastewater system currently benefits from solid debt service coverage ratios, strong rate setting flexibility and relatively less debt. Debt service coverage ratios in the 1.5 x range or greater are consistent with high 'A' category or 'AA/Aa' category ratings. High ratings are justified given strong demand and demographic fundamentals. The Wastewater system could sustain additional leverage such that annual debt service coverage could fall to the 1.25 x rate covenant and still maintain 'A' category ratings. This view is hinged upon the assumption that the system will maintain existing rate setting flexibility and that bond proceeds will be used to fund the system's capital improvement projects, including addressing federally mandated CSO projects. Management should also consider issuing debt under a subordinate structure so as to preserve/elevate existing ratings and augment bonding capacity. Such a subordinate debt structure could achieve 'A' category ratings.

The Waterworks system also benefits from strong demand and demographic fundamentals. However, rating setting flexibility is limited by Indiana Utility Regulatory Commission (IURC) oversight. This aspect of less rate-setting flexibility is a key credit factor. Credit quality is further compounded by the fact that the system has recently posted very low debt service coverage ratios. Unless debt service coverage ratios can credibly be projected to increase based on rate increases and the realization of operating synergies, limited additional debt capacity exists. This system's lower 1.1 x rate covenant is also a rating factor.

Credit-worthy, high quality and reliable water and wastewater systems are essential. The City, the IURC, project operators and other interested parties are committed to this project and the Waterworks credit quality will improve. The Waterworks, more limited and affordable capital improvement program of \$600 million over the next 15 years, also is an important credit metric. This is in contrast to the Wastewater systems more substantial capital improvement program through 2025. As the Wastewater system issues more debt, debt service coverage ratios between the systems may move closer and rating disparity may narrow.

Lastly, the rating agencies should opine favorably on a combined operating platform. The key credit factors are common ownership and synergies that can be achieved through one platform. These synergies would need to be detailed in a comprehensive and convincing rating presentation. We suggest, however, that given the existing rating differentials that outstanding and future bonds remain secured by their respective systems.



#### **Expedited Approach**

As highlighted above we are suggesting a Combined Waterworks and Wastewater Non-Profit Corporation Structure as the preferred option to create the most value for the City based on guidance from the EOI. Our details for the combined structure outlines separately the structures for both the Waterworks and Wastewater Systems based on their unique differences for debt and IURC regulation. As such there are options to execute our proposed structure in pieces.

We believe that any solution that provides an opportunity to monetize operational savings and capital cost avoidance is best served in a capital and operating partnership.

We believe that our suggested structure could be modified to include only corporate structural changes to the Wastewater System including execution of the significant Wastewater System capital improvements and/or CSO improvements.

Since we are uniquely structured with a capital execution capability under our Waterworks contract, we could execute the Wastewater system proposal on a standalone basis and modify our existing Waterworks contract to facilitate combined utility synergies for Wastewater System operations and add capital savings via our existing capital management terms of the Waterworks contract for Wastewater System capital and/or CSO capital needs. We could also work in conjunction with the existing Wastewater operator to provide synergies for both systems with appropriate contract modifications to the existing Wastewater System contract.

We believe that there are adequate opportunities to monetize the synergies and capital savings in this partial execution of our plan, providing the combined utility operational synergies, and reducing transaction costs and time to implement the strategy with the capital savings for the Wastewater system included or separated from the CSO capital execution to facilitate implementation efficiency.

## Section 9 – Compensation Models

Currently, Veolia Water serves over 650 communities with operations and maintenance services in North America. Veolia Water has broad experience in various approaches for compensation methodologies that relate to the operations and maintenance of Water and Wastewater systems. A majority of our existing contracts are firm fixed-fee contracts (for various terms up to 20 years), that contain an annual escalation clause within the guides lines of IRS Revenue Procedure 97-13. Some of our contracts, including the current Indianapolis Water contract include incentive provisions. In certain contract situations, Veolia Water has been compensated based upon a cost-plus

Did you know?

Veolia Water Indianapolis has improved customer service, since 2004 we have a better than 80% rate for calls answered within 30 seconds, and a call abandonment rate of under 4%, both of these rates are better than industry standards.

basis. These types of contracts are usually short term in nature and have required a quick response to a client's requirements with little or no time for due diligence.

United States Government contracts require that Veolia Water be compensated within current government guidelines and that the annual fee is subject to either an annual fee escalation or a price redetermination at fixed periodic times. Governmental contract terms are for various lengths of time.

When capital improvements are included within the scope of a contract, the most common approach is DBO, and Veolia Water has executed an industry leading 40 DBO projects across North America. In a DBO scenario, we submit a firm fixed price for the design-build components of the capital improvement, within an agreed upon risk profile with the client, that includes a long-term (up to 20 years) operations and maintenance period. Veolia Water has the responsibility for the full implementation of the capital improvement, including acceptance testing. Once the improvements have been accepted, the operations and maintenance term begins. Veolia Water has utilized multiple approaches for pricing DBO projects, including the firm fixed price as described above. In Tampa Bay, Veolia Water and the City utilized a cost-plus approach with a not-to-exceed price for a design-build water plant expansion; which included a co-management of contingency costs with incentives tied to contingency spend. We have experience where a blend of capital program compensation models are used to execute capital program management projects including firm fixed price, design-build, cost-plus, not-to-exceed, and unit pricing. A municipal client typically pays Veolia Water for design build or capital program management on draw down schedules based upon a percentage of completion methodology. The funding for the projects comes directly from the municipality. Funds are generally derived from cash on hand, bond issues, State Revolving Funds, or grants.



Another approach to fund capital improvements is Design Build Own Operate Transfer (DBOOT). The DBOOT approach is used when financing (either public or private) is required for the project to be completed, as outlined in the project Request for Proposals. A current example of this approach is in the largest desalination project in the world, located in Ashkelon, Israel. In the Ashkelon project, Veolia Water is the lead in a consortium that includes two Israeli partners. At the end of the contract term, the desalination facility will be transferred to local ownership.

Veolia Water also has experience in projects that have required equity investment. Examples are Shanghai-Pudong, China; Shenzhen Special Economic Zone, China; Berlin, Germany; and Scottish Water.

In the Shanghai-Pudong, China project, Veolia Water acquired a 50% share of a new joint venture. The joint venture has a license to provide water supply to the area for a 50-year period. Included within the scope of services are water production, water distribution, and customer service.

The Shenzhen Special Economic Zone project required that Veolia, along with a partner, acquire 45% of Shenzhen Water Group Company, LTD. Veolia Water was appointed to co-manage the water production and distribution, wastewater collection and treatment, and all customer services for a period of 50 years.

The public water and wastewater utility in Berlin privatized 49.9% of the utility in 1999. Veolia Water is a part of a consortium with RWE. RWE provided the investment and Veolia Water is the operator responsible for managing the water and wastewater systems. A 28-year contract was awarded for this project.

Veolia Water is a minority partner, along with six other companies, in Scottish Water Solutions Limited. The focus of Scottish Water Solutions is to support Scottish Water and to deliver the capital investment program. The unique business model brings global best practices from each of the eight partners to the Scottish water industry, particularly in the fields of asset management, engineering, program management, and construction.

In the United Kingdom, Veolia Water has invested in regulated utilities. One of those utilities is the previously referenced Three Valleys Water project, the largest water only utility in the UK, which serves over 3 million customers in the suburban London area. They operate and maintain surface and groundwater treatment plants, maintain the distribution system, and customer service (including billing and collections).

In conclusion, as worldwide leader in water and wastewater operations and capital management services, Veolia Water has participated in many different compensation models. The essence of this experience is an ability to adapt to our clients' specific objectives and requirements with respect to overall project objectives, risk transference and compensation approaches.

## Section 10 - Maximum Length for Strategic Partnership Relationships

Veolia Water understands that some respondents may be proposing structures where the maximum terms for relationships will be irrelevant, as their structures and change from City governance will be permanent. There are two partnership lengths to consider:

• Our recommended structure, as discussed earlier in Section 8, creates a vehicle that maintains oversight and governance with the City, while at the same time providing for value creation from synergies and capital savings; all of which is not tied to Veolia Water's management contract length. The length of that partnership will be discussed with the City to achieve the City's objectives; it can be structured so as to

in improvements, such as the residuals facility at the White River Plant, which we financed and which reduces solids loads to the wastewater plants.

Veolia Water has made a number of commitments to the

Indianapolis community and invested

Did you know?

give the City the option to terminate, or it can be structured with a longer term to create more upfront value.

• The contractual structure between Veolia Water and the tax-exempt vehicle will be limited in term length to no longer than 20 years, as allowed for under IRS 97-13 regulations, and renewal options will also have to comply with these regulations. We can be flexible in terms of contract term length, as well as contract component term lengths, such as the CSO capital execution term length. As evidenced by this REI, any contractual relationship with Veolia Water, as differentiated by a sale of the wastewater and waterworks systems, can provide provisions for early terminations agreed by the City and contractor.

Veolia Water's full resources stand ready to assist the City in this effort. We appreciate your interest in the potential to expand our partnership to serve the citizens of the City of Indianapolis and central Indiana.

